

- 16 -

CLAIMS

1. A ceramic plate material for the side dams of a twin-drum strip caster, the ceramic plate material containing Al of 9 mass% or more in terms of Al equivalent, characterized by having the properties of:  
5 bending strength at room temperature of not less than 120 MPa, bending strength at 1,000°C of not less than 65 MPa, hardness (Hv) of 50 to 350, fracture toughness  $K_{Ic}$  at 1,000°C of not less than 1 MPa·m<sup>1/2</sup>, thermal conductivity at a temperature from room temperature to 1,000°C of not more than 8 W/(m·K), thermal shock resistance index R' of not less than 800 W/m, and wettability with molten steel (contact angle θ) of not less than 120°.

15 2. A ceramic plate material for the side dams of a twin-drum strip caster according to claim 1, characterized by the Al content being 12.5 mass% or more in terms of Al equivalent.

20 3. A ceramic plate material for the side dams of a twin-drum strip caster according to claim 1 or 2, characterized by consisting of, in terms of mass%, BN of not less than 5% to not more than 20%, AlN of more than 15% to not more than 40% and Si<sub>3</sub>N<sub>4</sub> of not less than 40% to not more than 80%.

25 4. A ceramic plate material for the side dams of a twin-drum strip caster according to claim 3, characterized by containing, in terms of mass%, BN of not less than 10% to less than 20%.

30 5. A ceramic plate material for the side dams of a twin-drum strip caster according to claim 3 or 4, characterized by further containing, in terms of mass%, one or more of: Al<sub>2</sub>O<sub>3</sub> of not less than 1% to not more than 15%, MgO of not less than 1% to not more than 15%, ZrO<sub>2</sub> of not less than 1% to not more than 30% and Y<sub>2</sub>O<sub>3</sub> of not less than 1% to not more than 15%.